In the Specification:

[0019] The load lock chambers 106 are generally coupled between the factory interface 110 and the transfer chamber 102. The load lock chambers 106 are generally used to facilitate transfer of the substrates between the vacuum environment of the transfer chamber 102 and the substantially ambient environment of the factory interface 110 without loss of vacuum within the transfer chamber 102. Each load lock chamber 106 is selectively isolated from the transfer chamber 406 102 and the factory interface 110 through the use of slit valves (not shown).

[0025] At least one of the robots 160, 108 is interfaced with a sensing system 120 to comprise a robotic positioning system 150. The sensing system 120 provides information to monitor and/or correct the position of the robot. Although the robotic positioning system 150 shown to include the first transfer robot 160 disposed in the factory interface 110 of the exemplary processing system 100, the robotic positioning system 150 may be configured to include the second robot 108. It is also contemplated that it is desirable and contemplated that it is desirable to adapted adapt the robotic positioning system 150 for use with other robots utilized in other processing systems or semiconductor FABs, wherever accurate robot positioning and correction is desirable.